

Docket No. 742406-5
Serial No. 09/545,851
Page 2

AMENDMENTS TO THE CLAIMS:

Please amend claims 39, 40, 54-56, 61, and 70-72 as follows. This listing of claims will replace all prior versions, and listings, of claims in the application.

1-38. (Canceled)

39. (Currently Amended) A data transceiving system for causing a broadcasting station to transmit data to a plurality of television receivers through broadcasting and causing said television receivers to transmit response information to response information receiving equipment via a separate communication line,

wherein each of said television receivers receive determining data for determining initial transmission scheduling time and retrieval information containing a retrieval period transmitted by said broadcasting station at the same time,

and wherein the television receivers perform the following processing:

- 1) calculating the initial transmission scheduling time with a random number delay time at each of said receivers using the determining data for determining initial transmission scheduling time and storing the initial transmission scheduling time in memory;
- 2) transmitting the response information via a separate communication line when the initial transmission scheduling time comes;
- 3) when communication between the television receivers and the response information receiving equipment is unsuccessful, adding the retrieval period to the initial transmission scheduling time to calculate retrieval transmission scheduling time, and retransmitting the retrieval information via a separate communication line at the calculated retrieval transmission scheduling time;
- 4) when the retransmission of the retrieval information has failed, calculating a subsequent retrieval transmission scheduling time by adding the retrieval period to the retrieval transmission scheduling time and altering the condition of retrieval transmission based on the subsequent retrieval transmission scheduling time; and
- 5) repeating a process for retransmitting the retrieval information via a separate communication line at the subsequent retrieval transmission scheduling time until the retransmission of the retrieval information is successful.

10348097.3

Docket No. 742406-5
Serial No. 09/545,851
Page 3

40. (Currently Amended) A television receiver for displaying images in response to receipt of data transmitted by a broadcasting device and for transmitting response information to response information receiving equipment via a separate communication line, wherein the television receiver performs the following processing:

- 1) receiving determining data for determining initial transmission scheduling time and retrieval information containing a retrieval period transmitted by said broadcasting station at the same time;
- 2) calculating the initial transmission scheduling time with a random number delay time at each of said receivers using the determining data for determining initial transmission scheduling time, storing the initial transmission scheduling time in memory, and receiving response information via a separate communication line when the initial transmission scheduling time comes;
- 3) when communication between the television receivers and the response information receiving equipment is unsuccessful, adding the retrieval period to the initial transmission scheduling time to calculate retrieval transmission scheduling time, and retransmitting the retrieval information via a separate communication line at the calculated scheduling time;
- 4) when the retransmission of the retrieval information has failed, calculating a subsequent retrieval transmission scheduling time by adding the retrieval period to the retrieval transmission scheduling time and altering the condition of retrieval transmission based on the subsequent retrieval transmission scheduling time; and
- 5) repeating a process for retransmitting the retrieval information via a separate communication line at the subsequent retrieval transmission scheduling time until the retransmission of the retrieval information is successful.

41. (Canceled)

42. (Previously Presented) The television receiver according to claim 40, wherein determination as to whether or not to make retrieval transmissions is based on a transmission end time sent from said broadcasting device.

Docket No. 742406-5

Serial No. 09/545,851

Page 4

43. (Previously Presented) The television receiver according to claim 40, comprising detection means for detecting causes of non-establishment of communications with said response information receiving equipment.

44. (Previously Presented) The television receiver according to claim 43, comprising retrieval condition alteration means for altering conditions for subsequent retrieval transmissions based on said detected causes.

45. (Previously Presented) The television receiver according to claim 44, wherein said retrieval condition alteration means generate notification data for altering a setting time width for retrieval transmissions.

46. (Previously Presented) The television receiver according to claim 44, wherein said retrieval condition alteration means suspend retrieval transmissions.

47. (Previously Presented) The television receiver according to claim 43, wherein notification data is generated for notifying of said detected causes.

48. (Previously Presented) The television receiver according to claim 40, wherein time remaining for transmission is computed from a transmission end time sent from said broadcasting device, and said retrieval transmission conditions are altered according to said time remaining for transmission.

49. (Previously Presented) The television receiver according to claim 40, wherein notification data is generated for notifying of results of communications with said response information receiving equipment.

50. (Previously Presented) The television receiver according to claim 49, wherein communication results are received from said response information receiving equipment and notification data is generated.

10348097.3

Docket No. 742406-S
Serial No. 09/545,851
Page 5

51. (Previously Presented) The television receiver according to claim 49, wherein a history of communications with said response information receiving equipment is stored in a memory and notification data is generated.

52. (Previously Presented) The television receiver according to claim 42, comprising:
storing means for storing said response information to be transmitted after a delay;
and
notification means for notifying of said response information.

53. (Previously Presented) The television receiver according to claim 52, comprising editing means for editing said response information when an edit instruction is sent from a user.

54. (Currently Amended) A television receiver, comprising:
means for receiving data sent from a broadcasting device;
means for outputting display data to a display means based on said received data;
means for inputting response information by an operator based on display of said display data by said display means;
memory means for storing the response information, an initial transmission scheduling time, and a notification of an unsuccessful communication;
retrial condition alteration means for altering conditions of a retrial transmission; and
communication means for transmitting said response information via a separate communication line,
wherein said receiving means receives determining data for determining initial transmission scheduling time and retrial information containing a retrial period transmitted by said broadcasting station at the same time;
and wherein the communication means performs the following processing:
1) calculating the initial transmission scheduling time with a random number ~~delay time at each of said receivers~~ using the determining data for determining initial transmission scheduling time, forwarding the initial transmission scheduling time to the

10348097.3

Docket No. 742406-5

Serial No. 09/545,851

Page 6

memory means, and receiving response information via a separate communication line when the initial transmission scheduling time comes;

2) when communication between the television ~~receivers~~ and the receiver and response information receiving equipment is unsuccessful, adding the retrial period to the initial transmission scheduling time to calculate retrial transmission scheduling time, and retransmitting the retrial information via a separate communication line at the calculated retrial transmission scheduling time;

3) when the retransmission of the retrial information has failed, calculating a subsequent retrial transmission scheduling time by adding the retrial period to the retrial transmission scheduling time and altering the condition of retrial transmission based on the subsequent retrial transmission scheduling time; and

4) repeating a process for retransmitting the retrial information via a separate communication line at the subsequent retrial transmission scheduling time until the retransmission of the retrial information is successful.

55. (Currently Amended) A television receiver, comprising:

means for receiving data sent from a broadcasting device;

means for displaying data based on said received data;

memory means for storing an initial transmission scheduling time;

retrial condition alteration means for altering conditions of a retrial transmission; and

communication means for transmitting response information via a separate communication line,

wherein said receiving means determines data for determining the initial transmission scheduling time and retrial information containing a retrial period transmitted by said broadcasting ~~station~~ device at the same time,

and wherein the communication means performs the following processing:

1) calculating the initial transmission scheduling time with a random number delay time at each of said receivers using the determining data for determining initial transmission scheduling time, forwarding the initial transmission scheduling time to the memory means, and receiving response information via a separate communication line when the initial transmission scheduling time comes;

10348097.3

Docket No. 742406-S
Serial No. 09/545,851
Page 7

2) when communication between the television ~~receivers and the receiver~~ and response information receiving equipment is unsuccessful, adding the retrial period to the initial transmission scheduling time to calculate retrial transmission scheduling time, and retransmitting the retrial information via a separate communication line at the calculated retrial transmission scheduling time;

3) when the retransmission of the retrial information has failed, calculating a subsequent retrial transmission scheduling time by adding the retrial period to the retrial transmission scheduling time and altering the condition of retrial transmission based on the subsequent retrial transmission scheduling time; and

4) repeating a process for retransmitting the retrial information via a separate communication line at the subsequent retrial transmission scheduling time until the retransmission of the retrial information is successful.

56. (Currently Amended) A data receiving device, comprising:
means for receiving data sent from a broadcasting device;
memory means for storing an initial transmission scheduling time;
retrial condition alteration means for altering conditions of a retrial transmission; and
communication means for transmitting response information via a separate communication line,

wherein said receiving means receives determining data for determining initial transmission scheduling time and retrial information containing a retrial period transmitted by said broadcasting ~~station device~~ at the same time,

and wherein the communication means performs the following processing:

1) calculating the initial transmission scheduling time with a random number delay time at each of said receivers using the determining data for determining initial transmission scheduling time, forwarding the initial transmission scheduling time to the memory means, and receiving response information via a separate communication line when the initial transmission scheduling time comes;

2) when communication between the television ~~receivers and the data~~ receiving device and response information receiving equipment is unsuccessful, adding the retrial period to the initial transmission scheduling time to calculate retrial transmission

10348097.3

Docket No. 742406-5
Serial No. 09/545,851
Page 8

scheduling time, and retransmitting the retrieval information via a separate communication line at the calculated retrial transmission scheduling time;

3) when the retransmission of the retrieval information has failed, calculating a subsequent retrieval transmission scheduling time by adding the retrieval period to the retrieval transmission scheduling time and altering the condition of retrieval transmission based on the subsequent retrieval transmission scheduling time; and

4) repeating a process for retransmitting the retrieval information via a separate communication line at the subsequent retrieval transmission scheduling time until the retransmission of the retrieval information is successful.

57 and 58. (Canceled)

59. (Previously Presented) The data receiver according to claim 56, wherein determination as to whether or not to make retrieval transmission is made based on transmission end time provided by said broadcasting device.

60. (Previously Presented) The data receiver according to claim 56, comprising detection means for detecting causes of non-establishment of communications with said response information receiving equipment.

61. (Currently Amended) A television receiver, comprising:
a tuner for selecting a transport stream from data sent from a broadcasting device;
a transport stream decoder for selecting display data of a desired service from said selected transport stream;
an AV decoder for outputting said display data of said selected service to a monitor;
a control input unit for a user to input response information;
a line communication unit for sending said response information via a separate communication line;
a CPU;
retrial condition alteration means for altering conditions of a retrieval transmission; and
a memory in which a control program for said CPU is stored, and in which an initial transmission scheduling time is stored;

10348097.3

Docket No. 742406-5
Serial No. 09/545,851
Page 9

wherein said tuner receives determining data for determining initial transmission scheduling time and retrieval information transmitted by said broadcasting station device at the same time,

and wherein said control program performs the following processing:

1) calculating the initial transmission scheduling time with a random number delay time at each of said receivers using the determining data for determining initial transmission scheduling time, forwarding the initial transmission scheduling time to the memory, and receiving response information via a separate communication line when the initial transmission scheduling time comes;

2) when communication between the line communication unit and the response information receiving equipment is unsuccessful, adding the retrieval period to the initial transmission scheduling time to calculate retrieval transmission scheduling time, and retransmitting the retrieval information via a separate communication line at the calculated retrieval transmission scheduling time;

3) when the retransmission of the retrieval information has failed, calculating a subsequent retrieval transmission scheduling time by adding the retrieval period to the retrieval transmission scheduling time and altering the condition of retrieval transmission based on the subsequent retrieval transmission scheduling time; and

4) repeating a process for retransmitting the retrieval information via a separate communication line at the subsequent retrieval transmission scheduling time until the retransmission of the retrieval information is successful.

62-69. (Canceled)

70. (Currently Amended) A data transceiving method for receiving data from a broadcast device and sending response information via a separate communication line to a response information receiving equipment, comprising:

transmitting data for determining initial transmission scheduling time and retrieval information containing a retrieval period transmitted at the same time from said broadcasting device;

10348097.3

Docket No. 742406-5
Serial No. 09/545,851
Page 10

receiving the determining data for determining the initial transmission scheduling time and retrieval information containing the retrieval period transmitted by the broadcasting station at the same time,

calculating the initial transmission scheduling time with a random number delay time ~~at each of said receivers~~ using the determining data for determining initial transmission scheduling time;

storing the initial transmission scheduling time in memory;

sending response information via a separate communication line to the response information receiving equipment at the initial transmission scheduling time thus determined;

adding the retrieval period to the initial transmission scheduling time to calculate retrieval transmission scheduling time, and retransmitting the retrieval information via a separate communication line at the calculated retrieval transmission scheduling time when communication between the television receiver and the response information receiving equipment is unsuccessful;

calculating a subsequent retrieval transmission scheduling time by adding the retrieval period to the retrieval transmission scheduling time and altering the condition of retrieval transmission based on the subsequent retrieval transmission scheduling time, when the retransmission of the retrieval information ~~is~~ has failed; and

repeating a process for retransmitting the retrieval information via a separate communication line at the subsequent retrieval transmission scheduling time until the retransmission of the retrieval information is successful.

71. (Currently Amended) A program embodied in a recording medium for controlling, by a computer, a television receiver that receives data broadcast from a broadcasting device and sends response information to response information receiving equipment via a separate communication line,

wherein said program comprises instructions of:

receiving determining data for determining initial transmission scheduling time and retrieval information containing a retrieval period transmitted at the same time from said broadcasting device;

calculating the initial transmission scheduling time with a random number delay time using the determining data for determining initial transmission scheduling time;

10348097.3

Docket No. 742406-5

Serial No. 09/545,851

Page 11

storing the initial transmission scheduling time in memory;
sending response information via a separate communication line to the
response information receiving equipment at the initial transmission scheduling time thus
determined;

adding the retrial period to the initial transmission scheduling time to calculate
retrial transmission scheduling time, and retransmitting the retrial information via a separate
communication line at the calculated retrial transmission scheduling time when
communication between the television receiver and the response information receiving
equipment is unsuccessful;

calculating a subsequent retrial transmission scheduling time by adding the
retrial period to the retrial transmission scheduling time and altering the condition of retrial
transmission based on the subsequent retrial transmission scheduling time, when the
retransmission of the retrial information ~~is~~ has failed; and

repeating a process for retransmitting the retrial information via a separate
communication line at the subsequent retrial transmission scheduling time until the
retransmission of the retrial information is successful.

72. (Currently Amended) A data receiving device, comprising:
a tuner for receiving data sent from a broadcasting device;
a memory for storing an initial transmission scheduling time and a notification of an
unsuccessful communication;
retrial condition alteration means for altering conditions of a retrial transmission; and
a communication unit for transmitting response information via a separate
communication line,

wherein said tuner receives determining data for determining initial
transmission scheduling time and retrial information containing a retrial period transmitted by
said broadcasting ~~station~~ device at the same time,

and wherein the communication unit performs the following
processing:

1) calculating the initial transmission scheduling time with a random
number delay time at each of said receivers using the determining data for determining initial
transmission scheduling time, forwarding the initial transmission scheduling time to the

10348097.3

Docket No. 742406-5

Serial No. 09/545,851

Page 12

memory, and receiving response information via a separate communication line when the initial transmission scheduling time comes;

2) when communication between the ~~television receivers and the data receiving device~~ and response information receiving equipment is unsuccessful, adding the retrial period to the initial transmission scheduling time to calculate retrial transmission scheduling time, and retransmitting the retrial information via a separate communication line at the calculated retrial transmission scheduling time;

3) when the retransmission of the retrial information has failed, calculating a subsequent retrial transmission scheduling time by adding the retrial period to the retrial transmission scheduling time and altering the condition of retrial transmission based on the subsequent retrial transmission scheduling time; and

4) repeating a process for retransmitting the retrial information via a separate communication line at the subsequent retrial transmission scheduling time until the retransmission of the retrial information is successful.

73. (Previously Presented) The data receiver according to claim 72, wherein determination as to whether or not to make retrial transmission is made based on transmission end time provided by said broadcasting device.

74. (Previously Presented) The data receiver according to claim 72, comprising detection means for detecting causes of non-establishment of communications with said response information receiving equipment.